



# Oregon

John A. Kitzhaber, M.D., Governor

## Department of Environmental Quality

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May 30, 2001

Drew Gilpin  
Manager of Environmental Services  
Oregon Steel Mills  
P.O. box 2760  
Portland, Oregon, 97208

RE: **Pre-Remedial Investigation Field Activities Data Report &  
Historical Investigation Report  
Oregon Steel Mills, Portland, Oregon  
ECSI File No. 141**

Dear Mr. Gilpin:

Thank you for submitting the Pre-Remedial Investigation Historical Investigation Report dated March 21, 2001, and the Pre-Remedial Investigation Field Activities Data Report dated February 2, 2001 prepared by Exponent. The Oregon Department of Environmental Quality (DEQ) appreciates OSM efforts to investigate and document historical and current environmental issues at the site. DEQ has reviewed these two documents to assess whether the Oregon Steel Mill (OSM) site may contain source(s) of hazardous substances and potentially complete exposure pathway(s) to the Willamette River. DEQ's comments are presented below.

### General Comments

Based on the results of the Pre-Remedial Investigation Assessment (Pre-RI) DEQ has determined that there presently are sources, or potential sources, and pathway(s) for the release of hazardous substances from the facility to the Willamette River. This is based on the environmental concerns identified in the historical investigation information, and the concentrations of metals, PCBs and petroleum-related constituents in the sediment, soil and groundwater samples collected in the Pre-RI sampling.

**Action** – Based on this determination, Oregon Steel Mill is required to complete a Remedial Investigation (RI) at the site in accordance with the Voluntary Agreement dated June 14, 2000 between DEQ and Oregon Steel. Therefore the next step for the project is the completion and submittal of an RI Proposal.

The Pre-RI Assessment Work Plan (Exponent, 2000) identifies completion of the Pre-RI Assessment Report as the next step in the project. The Work Plan states that OSM will compile the information presented in the Historical Investigation Report and the Pre-RI Field Activities Report into a final Pre-RI Assessment Report following our review of these documents. In order to streamline the project, DEQ requests that this information be incorporated into the RI Proposal



and work plan. It is DEQ's expectation that the RI Proposal and the Historical Information Report will contain the necessary components of a Preliminary Assessment (PA) and will be considered the PA-equivalent document for the public administrative record. It is recommended that DEQ and OSM meet to discuss, the additional PA elements required in the document for the administrative record.

## **Pre-RI Historical Investigation Report**

The following comments focus on completing the Pre-RI Assessment to be a PA-equivalent document. These comments should be incorporated in the RI Proposal and subsequent documents.

### **General Comments**

A. Due to the large size of the OSM site, and different hazardous substances used and located in various portions of the site, DEQ requests that the site be subdivided into smaller manageable areas based upon operational areas (i.e., operable units) for the purposes of the PA and RI. This breakdown of the site will assist with completion of the PA requirements by:

- providing a concise understanding of potential hazardous substance use and their locations. This information will be used to identify the potential compounds of interest (COI) and potential or known release(s) in each area of the site;
- assisting in prioritizing and coordinating investigation of current or potential source areas;
- providing clear documentation of site activities and operations for the public record.

The attached figure is an example of how the site could be divided into operable units based upon the facility information.

**Action** – Review the proposed operable units and modify as appropriate based upon logical facility operating areas. Detailed maps of each of these areas, or combination of operable units will be needed in the initial stages of the RI Proposal to provide accurate locations of known and potential hazardous substance and source areas (current and historically).

B. The PA requires a broad approach in identifying current and historic hazardous substances, and where they are present at the site, and evaluating the current or potential releases to the environment (Comment #3 DEQ Letter to OSM dated August 9, 2000). A majority of this information is generally presented in the historical investigation report. However, to assist in understanding the potential issues in different portions of this site, this information should be broken down for each operable unit of the site. This list of hazardous substances is used to develop a specific list of COI for each operable unit of the site. The resulting COI list is then further refined throughout the project through either physical testing or written documentation describing the management of the COI.

**Action** – Potential current and historic hazardous substance releases in each of the operable units of the site need to be identified. The attached table, or equivalent, should be used to

document potential hazardous substances in each operable unit, and any known releases within that unit (table is available electronically). Reference material for hazardous substances at the site should include the Hazardous Substance Information Survey completed by OSM. The attached table should be modified to correspond to any general facility area sub-division changes identified in Comment A followed by the addition of any known release(s) within each operable unit of the site. Fill out the contents of the table (adding any COI as needed) to document the hazardous substance(s) and COI at the site.

### Specific Comments

1. Provide a historical summary of the northern portion of the site, (i.e., north of the "oil sump"). Currently no discussion of this portion of the site is presented.
2. Provide a discussion of over water or in water operations and hazardous substances that were historically or, are currently used in these operations.
3. DEQ provided specific guidance on completing Task 4 in the Pre-RI Work Plan (i.e., Summary of Reasons for No Further Action at Selected Areas of the Facility). This guidance is presented in Comment # 4 of the DEQ comment letter dated August 9, 2000. Specifically, the fourth bullet in this comment has not been addressed for any of the known releases reported in the historical investigation. The fourth bullet states:
  - Comparison of available data (*for each release*) to preliminary remedial goals (e.g. EPA Region 9), and ecological benchmark values. (*refer to Specific Comment # 11 for the appropriate screening ecological screening values and water quality criteria.*)

This bullet should be addressed in the RI Proposal prior to formulation of a site investigation approach.

4. What is the source of the berm material along the top of the riverbank?
5. Table 2, Area ID "C" is labeled as "unknown" on Figure 4. The RCRA report, dated September 30, 1992 shows the location of "C" on Figure 2 as a small shed north of the railroad tracks in the scrap yard area. Please verify this location and update the map, if appropriate.
6. Two pathways were identified as potentially complete for transporting COI to the river, storm water and groundwater discharge. It is assumed that the soil contamination leaching to groundwater pathway is evaluated as part of the groundwater pathway and will be evaluated either through groundwater data or soil leaching data in known or possible source areas.
7. Why do the storm water discharges need pH adjustment control equipment?
8. Update Table 2 and Figure 4 to include all recent spill(s).
9. As discussed during our site visit in January 2001, please provide DEQ with the following documents:
  - Slag Risk Assessment



- Hazardous Waste Determination for floor and roadway sweepings.

## Pre-RI Field Activities Data Summary

### Specific Comments

1. Do the groundwater sample metal results represent total or dissolved concentrations (i.e. were the samples filtered)? Were the GeoProbe groundwater sample locations developed prior to collecting water samples?
2. The locations of the storm water outfalls on the Figures (small circle) and the sampling locations suggest samples were collected above the outfall discharge location.

**Action** - Clarify the location of the samples, or the actual outfall location on the map.

3. DEQ is currently using the following ecological risk-based benchmark screening values for freshwater sediment. For organic compounds these are the lower of MacDonald's Threshold Effects Concentrations (TECs). If a compound is not present on the McDonald TEC list then the NOAA's Threshold Effects Levels (TELs). Ecological benchmark screening values for inorganics (i.e. metals) should use site background information where available. The appropriate groundwater screening values for discharge to the river are DEQ's Water Quality Criteria Summary - Table 20 (OAR 340-41-965) with the use of the federal ambient water quality criteria if a compound is not present on Table 20.

**Action** - Please revise the tables to reflect the use of these ecological benchmark screening values.

4. Location of the grab groundwater sample collected from GeoProbe boring B-2 was collected from an interval (14 to 24 feet bgs) below the identified zone of soil contamination in this boring (5 to 15 bgs). Please describe the rationale for the groundwater sample location.
5. What is sample SW0001 shown on the chain-of custody? Is this sample analytical results summarized in a report tables? Please clarify.

DEQ requests that OSM provide a written response to comments 1, 2, 4, and 5. Comment 3 should be incorporated in the RI Proposal and subsequent documents.

### Conclusions


DEQ has determination based upon the site information provided that presently there are sources, or potential sources, and pathway(s) for the release of hazardous substances from the facility to the Willamette River and that a RI is required for the site. The next steps in this process includes completing the PA-equivalent document and preparing a RI Proposal. Following your review of DEQ's comments and prior to submitting the final Pre-RI Assessment report I suggest we meet during the week of June 11, 2001 to discuss the project direction and how to efficiently complete the the appropriate PA documentation needs and begin discussing the approach to the RI.



Mr. Drew Gilpin  
Oregon Steel Mills  
May 30, 2001  
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Please feel free to call me with any questions or concerns at (503) 229-5562.

Sincerely,



Rodney G. Struck, R.G.  
Project Manager  
Voluntary Cleanup/Portland Harbor

Attachment: Table  
Figure

cc: ECSI File No. 141  
Matt McClincy/DEQ VCPH  
Bruce Brody-Heine/DEQ VCPH  
David Livermore/E'ponent



Oregon Steel Mill  
Development of Hazardous Substance List & Potential Compounds Of Interest (COIs)

				Potential Compounds Of Interest																																
Facility Area (a)	Potential or Known Releases	Hazardous Substances Used or Generated		Gasoline (b) related TPH	Diesel Range TPH	Oil/Lubricant TPH	PCBs	SVOCs	VOCs		Metals (b)														Air Conditioning Refrigerants	Sulfuric Acid	Caustic Soda	Anti-freeze	Calcium Fluoride	Other Compounds	Existing Analytical Data		Exceed Risk-Based Screening Criteria			Regulatory Status (describe)
											Priority Pollutant Metals																						Ancillary Metals		PRG Industrial (yes/no/unknown)	
		Historical	Currently						Chromium VOCs	Antimony	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Zinc	Barium	Cobalt	Manganese	Vanadium	(yes/no)	Data for "All" or "Some" of the COIs								
1 Northern Storage Area	General Area AST Release Landfill																																			
2 Plate Rolling & Mill Building and Shipping	General Former UST Area																																			
3 Metal Scrap Yard	General																																			
4 Slab Scarfing Facility	General																																			
5 Melt Shop & Electrical Substations	General Substations																																			
6 Vehicle Maintenance & Shops	General																																			
7 Surface Processing	General																																			
8 Mosely Shear Area	General																																			
9 Administration Building Area	General																																			
10 Southern Storage Area Water Treatment Facility Utility Area, & Former DRD Pond	General DRD Ponds																																			
11 Overwater Operations	General																																			

Notes:  
List of COIs from hazardous substance information survey, OSM's Toxic Substance and Hazardous Waste Reduction Policy, and the VCP Agreement.  
a) potential Source areas identified (Areas A through P) in the Pre-RI Historical Investigation Report (March 21, 2001) should be specifically listed under the appropriate Facility Area.  
b) Gasoline related TPH includes all associated compounds listed in the Risk Based Decision Making Guidance. (such as EDB, EDC, MTBE, lead, etc.)

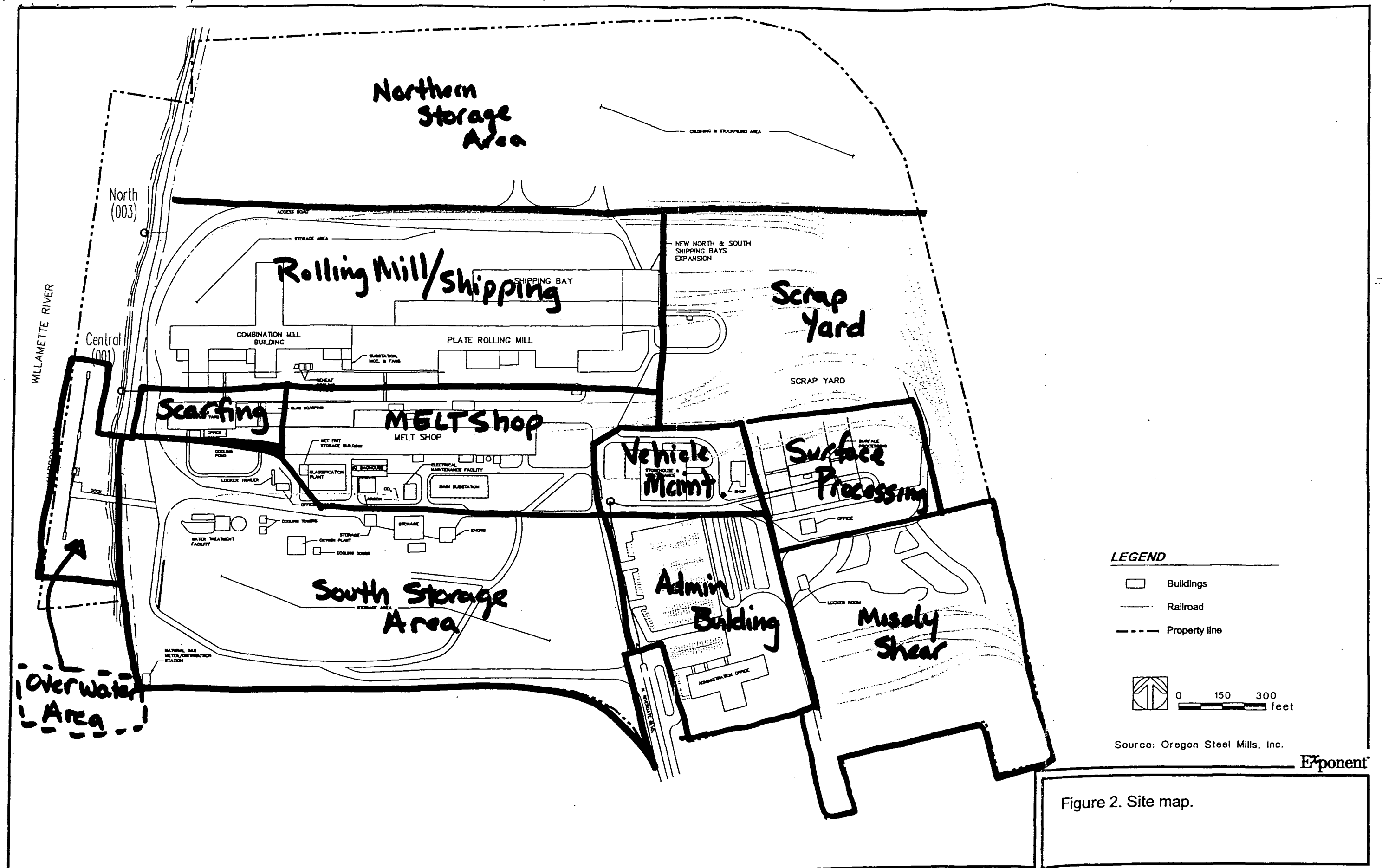


Figure 2. Site map.